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# SCIENTIST ASSAILS 'STAR WARS' PLAN

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WASHINGTON, Dec. 3 — A scientist who resigned in protest from a Pentagon advisory group on the President's space-based missile defense program told a Congressional committee today that the United States could not have confidence that the computer software for a "Stars Wars" defense would ever work.

"We cannot trust it," said David Parnas, adding that the computer software for such a system would be vulnerable to "catastrophic failures."

Dr. Parnas, a professor of computer science at the University of Victoria in Victoria, British Columbia, resigned in June from a Pentagon panel on the use of computers for battle management, saying the software for a defensive system in which the United States could place high reliance was an impossibility.

Since then, he has been debating with other scientific experts who have defended the "Star Wars" missile defense program, known formally as the Strategic Defense Initiative.

Dr. Parnas and some of his critics appeared before a Senate Armed Services subcommittee today to debate the problem.

## Chances for 'Realistic Testing'

Dr. Parnas said that he was involved in other military work and that he had no political objections to President Reagan's program to develop a space-based defense against ballistic missiles.

He said his criticism of "Star Wars" was based on a number of considerations, including the view that there would be "very limited opportunities for realistic testing" of the software.

Dr. Parnas also said there was a chance that Soviet spies could learn the details of software for a "Star Wars" system, and that this was an unacceptable risk for the United States. "We can not afford to depend on software in this way," he said.

Dr. Parnas said his criticisms applied to decentralized as well as centralized software designs.

Dr. Parnas's arguments were vigorously disputed by Solomon J. Buchsbaum, a vice president at the Bell Laboratories of A.T.&T., and Danny Cohen of the University of California. Both are on "Star Wars" panels organized by the Pentagon.

## Compensating for Errors

Dr. Buchsbaum said some critics have demanded that "Star Wars" software be perfect. He said in fact errors could be compensated for by a large system.

Dr. Buchsbaum said experience with the United States telephone system showed that the United States could develop a highly reliable system that could function well despite occasional small failures.

"The network as a whole is more reliable than its individual components," Dr. Buchsbaum said.

Dr. Parnas took exception to this analogy, arguing that the telephone system — unlike "Star Wars" — has been used extensively and does not have to work in the face of enemy who is trying to make it fail.

Mr. Cohen said that while he did not expect software breakthroughs, software "could be constructed to do the job."

He said that many critics have highlighted software difficulties because advances in other "Star Wars" technology, like sensors, have undercut other technical arguments of the critics.

## Rowny Discusses Treaty

In another arms control development, Lieut. Gen. Edward L. Rowny, who is retired from the Army, said today that the United States would not make a decision about whether to continue not to undercut the second strategic arms treaty until this spring or summer, when the Navy is to deploy another Trident submarine. General Rowny was once head of an American delegation to the strategic arms talks in Geneva and now is an Administration arms control adviser.

Although the 1979 treaty was never ratified by the United States, both sides have pledged not to undercut it. The agreement expires Dec. 31. Some Congressional critics of the agreement have said the Administration should review its commitment to maintain the agreement on the expiration date.

General Rowny said the treaty's expiration date "means nothing." He told a group of reporters that the "next milestone" for a decision on the treaty will come with the Trident deployment. To stay within the treaty's limit of 1,200 launchers of multiple-warhead ballistic missiles, the United States would have to dismantle Poseidon submarines or Minuteman III missile silos at that time.

General Rowny also said Congress should approve more money for strategic programs if money is requested by Defense Secretary Caspar W. Weinberger to respond to charges of Soviet arms control violations. The Defense Department is deliberating over such responses.

But General Rowny said Congressional actions would be affected by concerns over military spending and the Federal deficit. "In this climate it will be damn tough," he said.